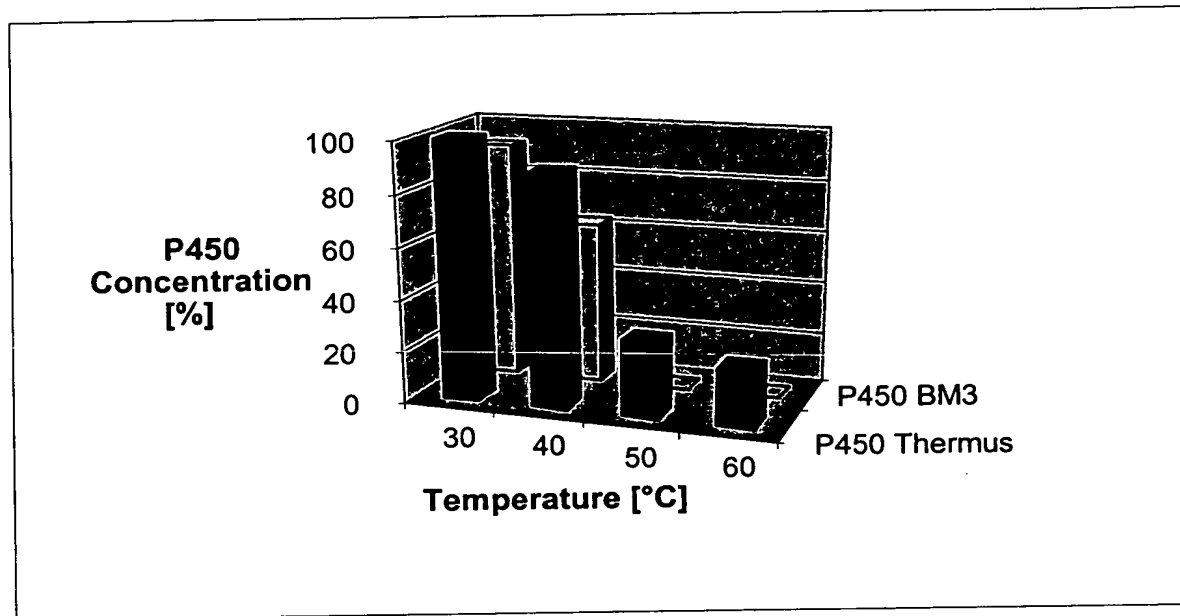


Fig. 1

P450 BM3	TIKEMPQPKTFGELKNLPLLNTDKPVQALMKIADELGEIFKFEAPGRVTRYLSSQRLIKE 60
P450 thermus	-MKRLSLREAWPYLKDLQOD----PLAVLLAWGRAHPRLFLPLPRFPLALIFDPE-GVEG 54
	:*:. . : : *:* * : . : * . : : : : : :
P450 BM3	ACDESRFDKNLSQALKFVRDFAGDGLFTSWTHEKNWKKAHNILLPSFSQQAMKGYHAMMV 120
P450 thermus	ALLAEGTTKATFQYRALSRLTGRGLLTDWG--ESWKEARKALKDPFLPKNVRGYREAME 111
	* . * * : * : * * * * : * : * : * : * :
P450 BM3	DIAVQLVQKWERLNADEHIEVPEDMTRLTLDTIGLCGFNYRFNSFYRDQPHPFITSMVRA 180
P450 thermus	EEARAFFGEWR----GEERDLDEHMLALSRLLLGRALFGKPLSPSLAEH-----ALKA 160
	: * : . : * . * : : * * * : * . * . : . : : : *
P450 BM3	LDEAMNKLQRANPDDPAYDENKRQFQEDIKVMNDLVDKIIADRKASGEQSDDLTHMLNG 240
P450 thermus	LDRIMAQTR--SPLALLDLAAEARFR-----K--DRGALYREAEALIVHPPLS 204
	** . * : : . * : : : * * * . : : * : * .
P450 BM3	KDPETGEPLDDENIRYQIIITFLIAGHETTSGLLSFALYFLVKNPHVLQAAEEAARVLVD 300
P450 thermus	HLP-----RERALSEAVTLLVAGHETVASALTWSFLLLSHRPDWQKRVAESEEALAA 257
	: * * . : : * : * : * * : : * : * . : * * . *
P450 BM3	PVPSYQVKQLKYVGMVLNEALRLWPTAPAFSLYAKEDTVLGGEYPLEKGDELMVLIPQL 360
P450 thermus	-----FQEALRLYPPAWILTRRLERPLLLG-EDRLPPG-TTLVLSPYV 298
	: : * * * : * * : : : . : * * * * * : * * * :
P450 BM3	HRDKTIWGDDVEEFRPERFENPSAIPQHAFKPFNGQORACIGQOFALHEATLVLGMLLK 420
P450 thermus	TQRLHFP--DGEAFRPERFLEERGTPSGRYFPFGLGQRLCLGRDFALLEGPIVLRRAFFRR 356
	: : * * * * * : . * . : * * * * * : * : * * * * : : :
P450 BM3	FDFEDHTNYELDIKETLTLKPEGFVVKAKSKKIPLGGIPS-PSTEQSAKKVR 471
P450 thermus	FRLDPLP--FPRVLAQVTLRPE-----GGLPARPREEVRA---- 389
	* : : . : : * * * * * * * : * * * *

Fig.2



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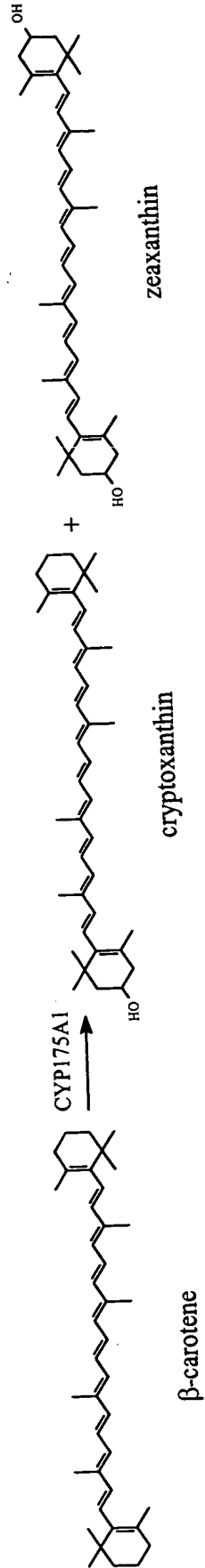


Fig. 3

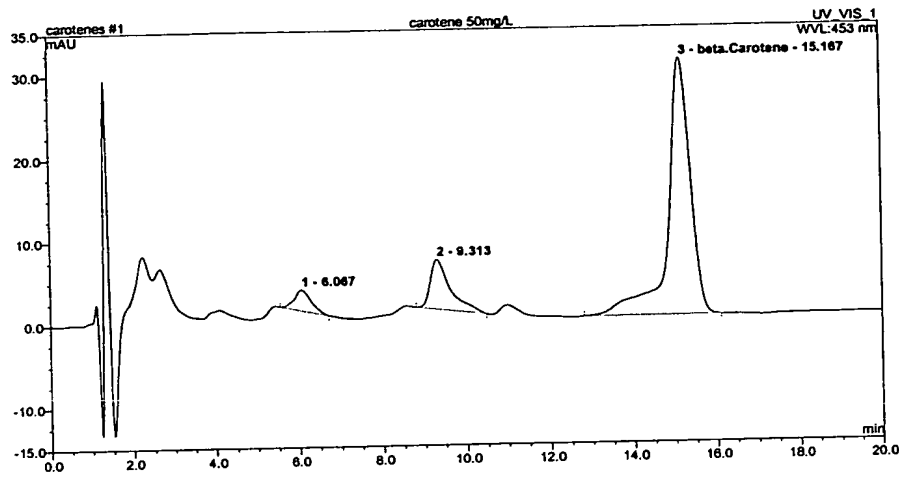
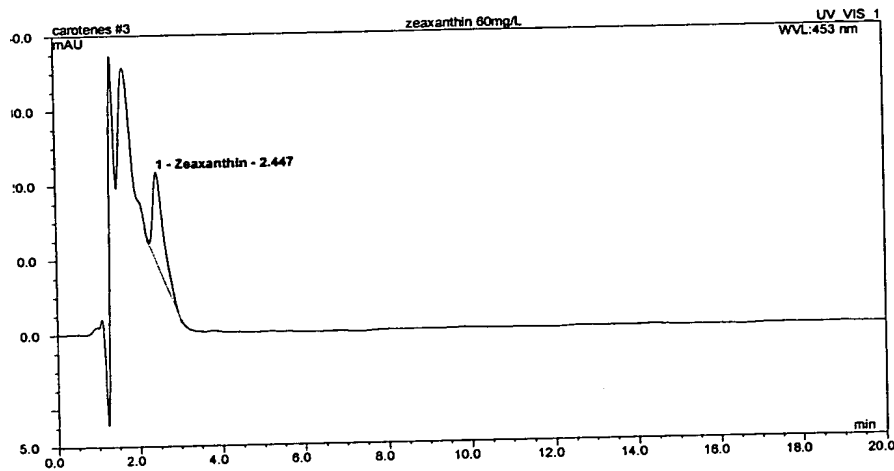
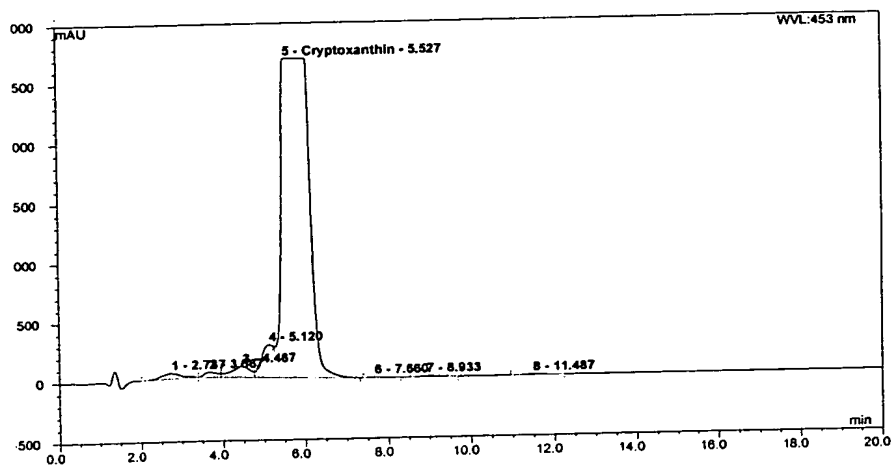
FIG. 4A: BETA - CAROTENE (Standard):**FIG. 4B: ZEAXANTHIN (Standard):****FIG 4C: Cryptoxanthin (Standard):**

FIG. 5A:

Sample Y (*E. COLI* comprising *CRTE*, *CRTB*, *CRTI* AND *CRTY* from *E. UREDOVORA*):

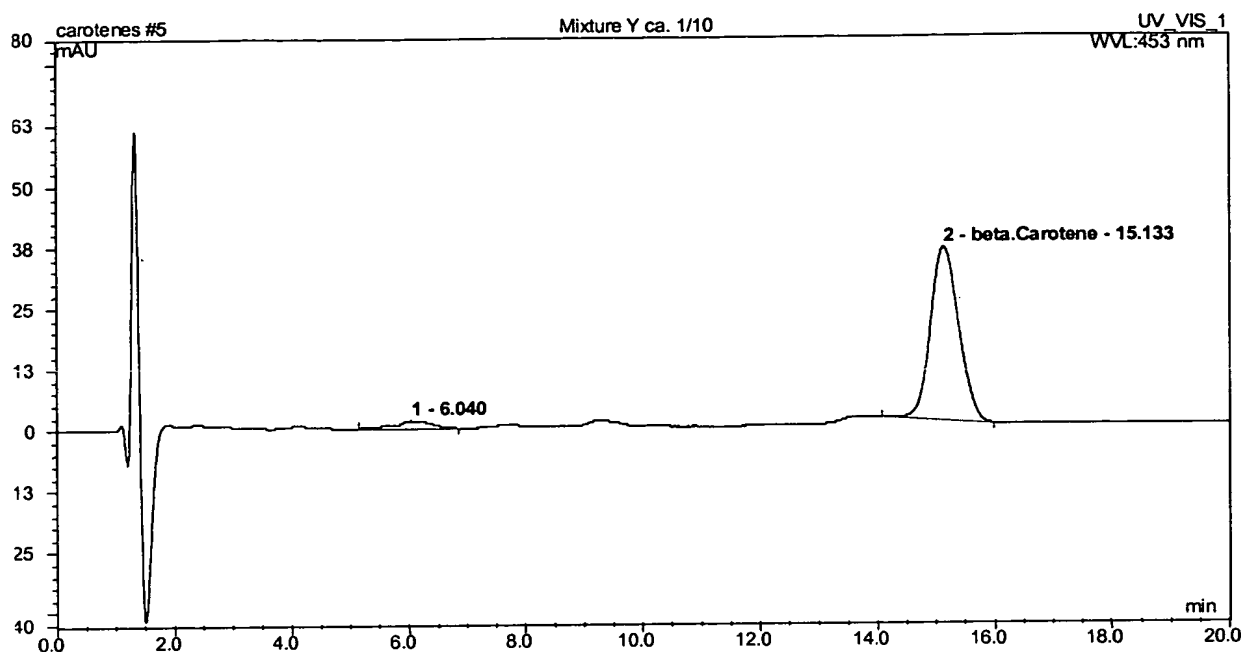


FIG. 5B:

Sample YF (*E. coli* comprising *CRTE*, *CRTB*, *CRTI* AND *CRTY* from *E. UREDOVORA* + *PKK_CYP*):

